SADC'S Integrated Regional Payment Settlement System (SIRESS): The impact on cross-border trade

This policy note presents work in progress by the Southern African Business Forum (SABF) to initiate the process of information sharing and dialogue amongst all stakeholders – public and private - in the important commitment to research and development.

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Africa is the least financially integrated continent in the world. It is composed of many small countries with poorly developed, inefficient and costly financial infrastructure. The presence of small and inefficient underdeveloped financial markets stifles both inter-regional and international trade.

Intra-African trade among member states is stifled by increased settlement risks, such as the use of counterfeit currency in cross-border trade and by prolonging the settlement period between exporters and importers by using truck drivers as cash carriers instead of formal banking systems. International trade is obstructed for many of the same reasons, reducing African exports to the rest of the world. Over the years, the efficiency of the financial markets has improved by the establishment of regional payment systems whose aim is to shorten the payment period between exporters and importers and to reduce the cost of conducting cross-border trade. Given the importance of regional payment systems on trade, this policy brief will explore the benefits of Southern African Development Community (SADC)'s Integrated Regional Settlement System (SIRESS) in the region to both private and the public sector.

1.2 What is SIRESS? SIRESS is an inter-bank electronic central settlement system developed to settle cross-border payments among SADC member states in real time[1] and in gross basis[2]. SIRESS replaced paper based transactions such as cheques and bank drafts which were unpopular because of inefficiency and cost.[3]

The development of SIRESS is in-line with the Southern African Development Community (SADC)'s Finance and Investment Protocol (FIP) whose objective is to create a regional integrated payment system that facilitates payment of cross-border transactions between SADC member states.[4] Moreover, SIRESS's development is part of the region's political objective of achieving a single monetary union by 2018. SIRESS was established by the region's Committee of Central Bank Governors (CCBG) to fulfil the objectives of the SADC Finance and Investment Protocol (FIP) charter which states that, among other things, "SADC countries should cooperate on payment, clearing and settlement systems in order to facilitate trade integration". [5] As such, SIRESS's development supports SADC'S aims and objectives of "facilitation of trade, smoother and efficient execution of cross-border transactions, and integration in information and communications technologies".[6] Its establishment is in line with

[1] Real time means that payments are immediately cleared without any waiting period.

[2] Means the transaction is settled on one-to-one basis without bundling with other transactions.

[3] Economic Review, 2013

[4] [4] SADC countries are-Angola, Botswana, DR Congo, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Zambia, Zimbabwe

[5] SARB, 2014

[6] Finmark Trust, 2016

the political and economic objectives of SADC of integrating the economies of SADC member states in a way that will improve intra-regional trade.

1.3 The establishment of SIRESS

SIRESS was first introduced in the market on the 22nd of July 2013 in the four-common monetary area (CMA) countries of Lesotho, South Africa, Swaziland and Namibia, and later extended to non-CMA countries in the region[7]. It is operated by the South African Reserve Bank (SARB), which also acts as the settlement bank on behalf of the SADC Committee of Central Banks. The participants of SIRESS are central banks (CB) and domestic financial institutions from SADC countries.[8] SIRESS's activities are regulated by CCBG with the SADC Banking Association responsible for coordinating the activities of participating commercial banks. SIRESS uses the South African Rand as the transacting currency, but plans are underway to introduce other regional currencies and the US Dollar as alternative trading currencies soon. In receiving countries, payment is made in the country's local currency or in Rands. SIRESS's main characteristics are that:

- Each country maintains its own currency for the foreseeable future;
- Each country maintains its own financial infrastructures;
- All intra-SADC payments are aimed to be settled over the central settlement system (SIRESS) over time;
- Participating banks including central banks are required to maintain settlement accounts at SIRESS.

1.5 What SIRESS is aimed at?

SIRESS's main objective is to stimulate regional economic growth and poverty alleviation in SADC by increasing intra-regional trade among SADC member states. It aims to achieve this by decreasing the cost of trade in the region and by shortening the settlement period between exporters and importers. Other objectives of SIRESS are to:

I. Boost socio-economic development in SADC by increasing trade and financial inclusion through reducing transaction costs in cross-border trade and by eliminating use of correspondent banks.
II. Reduce risks which are associated with cross-border remittances and cross-border trade.
III. Replace expensive remittance channels with affordable remittance channels.
IV. Enables small countries that cannot afford their own national payment systems access to secure payment systems without worrying about the payment channels.[9]
V. Modernisation of settlement systems directly improving the circulation of goods and services.
VI. Reducing administrative delays associated with currency conversions, foreign exchange regulations and transferring of funds between countries and banks.

1.4 SIRESS and Cross-border transactions

SIRESS enables the settlement of cross-border transactions to happen within a day whereas with the old cheque and paper-based transactions, settlement took between seven and 21 days.[10] It enables payments to be settled directly amongst banks without the need for payments to flow through third party clearing

[7] Wentworth L, 2013
[8] Domestic institutions must first get permission from their domestic CB before they can be admitted as a SIRESS member
[9] United Nations Economic Commission for Africa, 2010
[10] Wentworth L, 2013

houses (i.e. through correspondent banking arrangements). Through SIRESS, cross-border payments are now efficient, less costly, fast and safe. Sending payments through SIRESS saves SADC member states from paying international bank charges associated with the use of correspondent banking.

According to Nasser Dowlut, a Mauritian entrepreneur, SIRESS helped him to expand his business by making it easier to receive international payments from the region. Prior to SIRESS, Dowlut employed only three people and operated from one site as he worried about the challenges of receiving international payments. Since initiating the use of SIRESS for his business, he now employs over one hundred people and has expanded his operations from one to three branches in Port Louis.[11]

Empirical research shows that "since countries in Southern Africa started using the SIRESS system to pay for goods traded in SADC in 2013, regional business has developed greatly because of the reduction in transaction costs".[12] In turn, the increase of intra-regional trade is expected to result in greater job creation in the region and ultimately lead to economic growth and development.

1.2 SIRESS and cross-border remittances

In addition to the settlement of cross-border transactions, SIRESS is also used to send remittances in the region. Research shows that Southern Africa has the most expensive remittance corridors in the world and that most of the remittances originate from South Africa to other countries in SADC, notably to Lesotho, Mozambique and Zimbabwe. Foreign nationals working in South Africa or other SADC countries use both formal and informal channels to send money to their relatives in their home counties.

Formal channels involving normal banking systems to send remittances across the region are expensive. According to a report by Voorhies, formal institutions such as banks charge fees ranging from 5% to 20% of the total amount sent.[13] Informal cross-border remittance channels range from using friends, relatives, and bus and taxi drivers to physically transport money across borders. Informal remittance channels unlike formal remittance channels are cheap with payment negotiated between the sender and the transporter. However, using relatives and bus drivers to transport money across borders is often unsafe, as theft or accidents are real possibilities. In addition, it takes days for the money to reach its intended destination due to delays at border posts and due to the distances involved.

Against this background, SADC developed SIRESS among other measures to ease the process of sending cross-border remittances across the region. SIRESS shortens the remittance period and eliminates remittance risks mentioned above. Through SIRESS, the cost of sending cross-border remittances in the region is envisaged to decrease soon, already the settlement period of cross-border remittances is now cut to a single day and most risks associated with the unconventional banking systems have been eliminated.

1.6 Correspondent banking

A correspondent bank is a financial institution that provides financial services such as accepting deposits, conducting business transactions, or facilitating money transfers on behalf of another bank. Correspondent banking involves using intermediaries between two

[11] SADC Success Stories, 2015

[12] Ventures for Africa, 2015

[13] Voorhies R, 2015

financial institutions to complete cross-border transactions. Correspondent banks' involvement increases cross-border transaction costs and increase the settlement periods since most of the correspondent banks are located in the USA or in the UK.

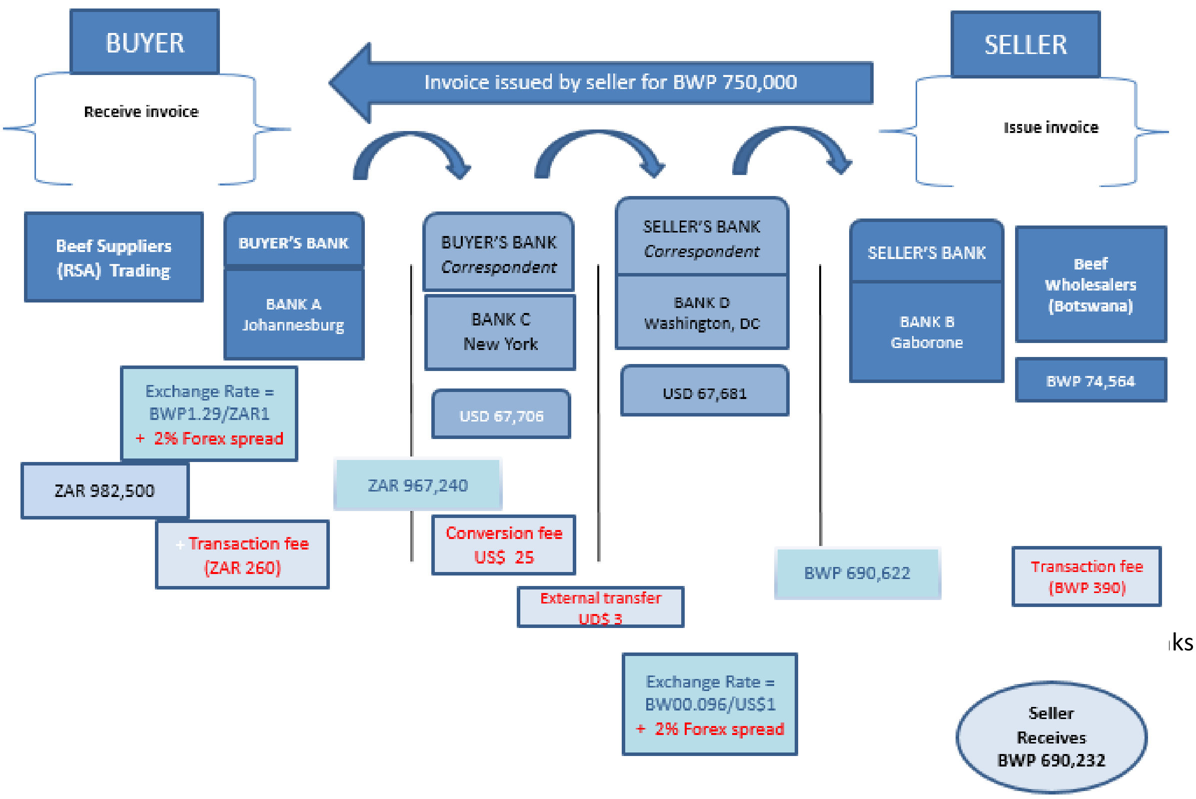
For example, a company based in Johannesburg that imports goods from Gaborone would have the goods travel 350km between the two cities but payment would take longer by being routed from South Africa to Botswana via a clearing bank in London or New York and the cost borne by the banks during this process, would be passed on to the importer or exporter, or both.

For this reason, the strong view is that correspondent banking has stifled regional economic growth as it increases the cost of trade, as well as prolongs the settlement period. These are challenges that the advent of SIRESS has corrected. SIRESS cuts out the need for correspondent banking in cross-border payments, effectively reducing the fees that were previously paid to non-SADC banks by cutting out the 'middlemen'. Further, SIRESS shortens the settlement period between importers and exporters.

SIRESS aims at making the transaction clearance process quicker and cheaper, and its increasing use in the SADC region shows that it has become the preferred payment channel. Unlike correspondent banking, SIRESS cuts out intermediaries and hence, facilitates cross-border regional payment transactions that boost intra-SADC trade.

Correspondent banking typically works as outlined in the table below. Beef Suppliers RSA uses its bank, **Bank A in South Africa** to make a payment for the purchase of beef procured from Botswana Wholesalers invoiced in Botswana Pula, at a cost of P750 000 to a trader who uses **Bank B in Botswana**:

Hypothetical Model: Financial Leakage in Cross-Border Transaction via Correspondent Banking[14]



1.7 How does SIRESS Operate?

SIRESS operates through two settlement accounts – Continuous Processing Line (CPL) and the Real Time Line (RTL) accounts. [15] The CPL is an account facility used for settling single-settlement instructions immediately on gross basis, and the RTL account is a delayed settlement account developed to settle **single-settlement instructions**[16] on a gross basis.

In the CPL, transactions received in SIRESS go into a processing queue in order to check that there are sufficient funds available, at which stage the payment is processed. If there are insufficient funds in the account, the paying bank could secure a temporary loan in the inter-bank money markets against recognised collateral to ensure the payment of its obligations.[17]

Alternatively, the participating bank may use the lending facilities available from its domestic central bank to fund its obligations. Payments remain unprocessed in the CPL account until inward funds are received or the bank in question can service its payment obligations. If by the end of the day, the transaction is still unserviced, the transaction is discarded and the bank in question will be informed. The transaction will have to be resubmitted the following working day.

RTL transactions, on the other hand, must be pre-funded meaning that transactions received on SIRESS without having been pre-funded or when there are insufficient funds on the account are automatically rejected. In other words, for the transactions to be settled, the bank in question must first pre-fund its account and re-submit the transaction.[18] CPL is used by banks when dealing with settlements that do not require immediate settlement but rather settlement within the same day.

The two accounts are connected to SIRESS by the Society for Worldwide Interbank Financial Telecommunication (SWIFT) network. SWIFT provides secure messaging services and interface software, contributing to greater automation of financial transaction processes to banks and other financial institutions.[19] Therefore, to send an electronic transfer to, for instance, Zimbabwe or Mauritius through SIRESS, a bank in South Africa will instruct SIRESS to debit the paying bank's settlement account (RTL or CPL) through a SWIFT message and to credit the receiving bank's settlement account. Once completed, an electronic advice of debit and credit, as well as bank statements are generated from the SIRESS and are sent to the paying banks and the receiving bank for verification.

2.0 Membership

SIRESS membership is open to any financial institution within SADC that participates in their domestic settlement system. It is also open to any banks that have been approved by their domestic central banks to join SIRESS upon meeting SIRESS access criteria.[20]

At inception, four central banks and 17 commercial banks participated in SIRESS.[21] Since then, ten countries and seven central banks are now participating in SIRESS. The number of commercial banks participating in

[15] Economic Review, 2013
[16]
[17] Economic Review, 2013
[18] Economic Review, 2013
[19] Economic Review, 2013
[20] What or where are these?
[21] Gei-Khoibeb B, 2014: 14 countries are SIRESS members. The total number of participating banks including central banks participating on SIRESS in 2017 are 83

SIRESS has also grown to 72.[22] SIRESS participating is illustrated in the map below:

Map 1: SIRESS participation June 2017

2.1 SIRESS and Transaction Costs

The cost of sending cross-border settlements is still high. Commercial banks are still charging correspondent fees even where SIRESS is used – which is contrary to what had been mooted with the transition to SIRESS. This behaviour is widespread in all participating countries operating in the region. The SADC CCBG is focusing on policy regulations to address this challenge. It is anticipated that once the regulations are adopted, all financial institutions active on SIRESS would be required by law to charge the lower facilitation fess. Using South Africa as an example, the National Payment System Department at South African Resreve Bank charges participating banks R15 for each transaction regardless of the value of the transaction sent via SIRESS. On the other hand, commercial banks charge customers exorbitant fees per transaction, averaging at R125.[23]

[22] SARB, 2017
[23] Bidvest website, https://www.bidvestbank.co.za/business-banking/forex-services/international-payments/cross-border-payment-system.aspx - last accessed 21 July 2017.

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2.3 SIRESS and Trade

Statistics show SIRESS to have increased cross-border trade in the SADC region. The statistics show that cross-border trade increased from R13 billion in 2013 to R1,157 trillion in 2015 thought to be caused, at least in part, by the decrease in the settlement period from days to hours. Between 2015 and 2017, the amount of cross-border trade increased from R1,157 trillion to R2,232 trillion or USD$155,82 billion. According to Hugo Smit, head of sub-Saharan Africa for SWIFT, SIRESS processed 43% of cross-border transactions in 2015 in the SADC region.[24]

3.0 Conclusion

SIRESS supports the modernisation and harmonization of payments and clearing systems both domestically and regionally in order to achieve increased safety of payments and faster settlement payment processes. It has increased cross-border trade by making cross-border payments efficient and faster. Prior to this, cross-border payments delayed clearing and in the process slowed down regional trade. SIRESS's implementation supports ongoing regional economic and financial integration and development measures. Statistics show that trade increased between 2013 and 2016 and that the amount of transactions settled through SIRESS between 2013 and 2017 increased from R13 billion to R2,232 trillion in April 2017.

SIRESS has within a few years of existence begun to displace correspondent banking and is now the preferred method of sending cross-border payments. SIRESS has evolved from a system that could send only high value transactions into a system which now accommodates both high value and low value cross-border transactions. From four countries in 2013, SIRESS is now active in fourteen SADC countries.[25] At the same time, the number of participating central banks and commercial banks have increased. SIRESS's only setback is that transaction costs have not yet decreased since participating banks are still charging correspondent banking fees. This situation is poised to change – and should be supported by regional traders who will only benefit from lower charges.

[24] Matsilele T, 2015

[25] All SADC countries excluding Madagascar